Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 10/22/2014 AVERAGE SEVERITY GRADES[b]

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Time Report Requested: 14:11:59

First Dose M/F: NA / NA

Lab: NCTR

C Number: MG96005

Lock Date: Not Entered.

Cage Range: ΑII

Date Range: ΑII

Reasons For Removal: ΑII

Removal Date Range: ΑII

Treatment Groups: ΑII

Study Gender: Both

PWG Approval Date NONE

Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/22/2014 Time Report Requested: 14:11:59

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Time Report Requested: 14:11:59

First Dose M/F: NA / NA

CD Rat MALE	FO 0 PPM	F0 5 PPM	F0 100 PPM	F0 500 PPN
Disposition Summary				
Animals Initially In Study	25	25	25	25
Early Deaths				
Natural Death	1			
Survivors				
Terminal Sacrifice	24	25	25	25
Animals Examined Microscopically	25	25	25	25
ALIMENTARY SYSTEM				
Liver	(24)	(6)	(0)	(25)
Fibrosis	1 [2.0]	1 [3.0]		
Hemorrhage				1 [1.0]
Hepatodiaphragmatic Nodule	3	1		2
Inflammation, Chronic	18 [1.1]			19 [1.0]
Malformation		3		2
Necrosis	2 [1.0]			4 [1.3]
Perivascular, Fibrosis		1 [2.0]		
Vacuolization Cytoplasmic	7 [1.1]			8 [1.0]
Mesentery	(0)	(0)	(0)	(1)
Fat, Inflammation, Chronic				1 [4.0]
Salivary Glands	(1)	(0)	(0)	(0)
CARDIOVASCULAR SYSTEM				
Blood Vessel	(1)	(0)	(0)	(0)
Heart	(1)	(0)	(0)	(0)
ENDOCRINE SYSTEM				
Adrenal Cortex	(23)	(0)	(0)	(25)
Accessory Adrenal Cortical Nodule	1			1
Adrenal Medulla	(22)	(0)	(0)	(25)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED FEED

Species/Strain: Rat/CD

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First Dose M/F: NA / NA

CD Rat MALE	FO OPPM	F0 5 PPM	F0 100 PPM	F0 500 PPM
Parathyroid Gland	(1)	(0)	(1)	(0)
Pituitary Gland	(24)	(0)	(0)	(25)
Pars Distalis, Cyst, Multiple				2
Thyroid Gland	(24)	(0)	(0)	(25)
Inflammation, Chronic	1 [1.0]			2 [1.0]
GENERAL BODY SYSTEM None				
GENITAL SYSTEM				
Coagulating Gland	(23)	(24)	(22)	(25)
Epididymis	(24)	(25)	(25)	(25)
Hypospermia	2 [2.5]			1 [4.0]
Infiltration Cellular, Lymphocyte	1 [1.0]	2 [1.0]	2 [1.0]	
Preputial Gland	(0)	(0)	(0)	(1)
Duct, Dilatation				1 [4.0]
Inflammation, Suppurative				1 [4.0]
Prostate	(2)	(5)	(4)	(4)
Prostate, Dorsal Lobe	(23)	(25)	(25)	(25)
Inflammation, Chronic	6 [1.0]	4 [1.3]	6 [1.3]	10 [1.3]
Inflammation, Suppurative	8 [1.3]	9 [1.8]	7 [1.6]	16 [1.4]
Prostate, Ventral Lobe	(23)	(25)	(25)	(25)
Inflammation, Chronic	17 [1.6]	16 [1.3]	19 [1.3]	17 [1.2]
Inflammation, Suppurative	2 [1.5]	2 [1.5]	2 [1.5]	2 [2.0]
Rete Testes	(24)	(25)	(24)	(25)
Dilatation	2 [2.5]			
Seminal Vesicle	(24)	(23)	(25)	(24)
Dilatation	3 [2.0]	1 [2.0]		1 [2.0]
Epithelium, Degeneration	1 [2.0]			
Malformation		1		

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Route: DOSED FEED

URINARY SYSTEM

Species/Strain: Rat/CD

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Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Time Report Requested: 14:11:59

First Dose M/F: NA / NA

CD Rat MALE	FO OPPM	F0 5 PPM	F0 100 PPM	F0 500 PPI
Testes	(25)	(25)	(25)	(25)
Autolysis	1			
Edema				1 [2.0]
Seminif Tub, Degeneration	3 [3.0]	2 [2.0]	2 [1.0]	2 [2.5]
HEMATOPOIETIC SYSTEM				
Bone Marrow	(24)	(0)	(0)	(25)
Spleen	(24)	(0)	(0)	(25)
Adventitia, Inflammation, Chronic				2 [1.0]
Capsule, Fibrosis				1 [2.0]
Capsule, Inflammation, Chronic				1 [1.0]
Pigmentation	5 [1.0]			9 [1.3]
Thymus	(24)	(0)	(0)	(23)
INTEGUMENTARY SYSTEM				
Mammary Gland	(23)	(24)	(23)	(24)
Alveolus, Hyperplasia	1 [1.0]	3 [1.3]	2 [1.5]	5 [1.6]
Duct, Hyperplasia				1 [1.0]
Skin	(25)	(0)	(0)	(25)
MUSCULOSKELETAL SYSTEM				
Bone, Femur	(25)	(0)	(0)	(25)
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
None	,	,		,
SPECIAL SENSES SYSTEM				
None				

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Route: DOSED FEED

Species/Strain: Rat/CD

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Date Report Requested: 10/22/2014
Time Report Requested: 14:11:59

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Time Report Requested: 14:11:59

Lab: NCTR

First Dose M/F: NA / NA

CD Rat MALE	FO 0 PPM	F0 5 PPM	F0 100 PPM	F0 500 PPN
Kidney	(24)	(0)	(1)	(25)
Casts Protein	1 [1.0]			1 [1.0]
Cortex, Cyst			1	
Hyaline Droplet	2 [1.0]			
Inflammation, Chronic	20 [1.1]			18 [1.1]
Interstitium, Fibrosis	2 [2.0]			
Renal Tubule, Dilatation	8 [1.8]			8 [1.0]
Renal Tubule, Mineralization	1 [1.0]			
Renal Tubule, Regeneration	10 [1.0]			7 [1.0]

^{***}END OF MALE DATA***

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/22/2014 Time Report Requested: 14:11:59

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Time Report Requested: 14:11:59

First Dose M/F: NA / NA

CD Rat FEMALE	FO OPPM	F0 5 PPM	F0 100 PPM	F0 500 PPM
Disposition Summary				
Animals Initially In Study	26	25	26	25
Early Deaths				
Moribund	1		1	
Survivors				
Terminal Sacrifice	25	25	25	25
Animals Examined Microscopically	26	25	26	25
ALIMENTARY SYSTEM				
Esophagus	(1)	(0)	(1)	(0)
Dilatation	1 [3.0]			
Intestine Large, Cecum	(1)	(0)	(1)	(0)
Intestine Large, Colon	(1)	(0)	(1)	(0)
Intestine Small, Duodenum	(1)	(0)	(1)	(0)
Intestine Small, Ileum	(1)	(0)	(1)	(0)
Intestine Small, Jejunum	(1)	(0)	(1)	(0)
Liver	(26)	(1)	(1)	(25)
Crystals			1 [4.0]	
Developmental Malformation	3	1		
Inflammation, Chronic Active	1 [2.0]			2 [1.5]
Left Lat Lobe, Developmental Malformation				2
Median Lobe, Developmental Malformation				1
Pancreas	(1)	(0)	(1)	(0)
Salivary Glands	(1)	(0)	(1)	(0)
Stomach, Forestomach	(1)	(0)	(1)	(0)
Stomach, Glandular	(1)	(0)	(1)	(0)
CARDIOVASCULAR SYSTEM				
Heart	(1)	(0)	(1)	(0)
Cardiomyopathy	1 [2.0]			

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Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/22/2014 Time Report Requested: 14:11:59

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Time Report Requested: 14:11:59

First Dose M/F: NA / NA

CD Rat FEMALE	FO 0 PPM	F0 5 PPM	F0 100 PPM	F0 500 PPN
ENDOCRINE SYSTEM				
Adrenal Cortex	(26)	(0)	(1)	(25)
Adrenal Medulla	(26)	(0)	(1)	(25)
Bilateral, Vacuolization Cytoplasmic	1 [2.0]			
Pituitary Gland	(26)	(0)	(1)	(25)
Thyroid Gland	(25)	(0)	(1)	(25)
GENERAL BODY SYSTEM None				
GENITAL SYSTEM				
Clitoral Gland	(0)	(1)	(1)	(1)
Abscess				1
Inflammation, Chronic Active		1 [2.0]		
Keratin Cyst				1
Ovary	(26)	(25)	(26)	(25)
Corpus Luteum, Hypertrophy			1 [3.0]	
Diestrus	10	9	7	6
Estrus	2	2	1	
Metestrus	6	6	8	13
Proestrus	8	8	9	6
Oviduct	(26)	(25)	(26)	(25)
Estrus				1
Uterus	(26)	(25)	(26)	(25)
Decidual Reaction	24	24	24	23
Diestrus	10	9	7	6
Estrus	2	2	1	
Infiltration Cellular, Eosinophil	1 [3.0]			
Metestrus	7	5	8	13
Pregnancy			1	

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Experiment Number: 99930-99 Test Type: SPECIAL STUDY Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/22/2014 Time Report Requested: 14:11:59

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Time Report Requested: 14:11:59

First Dose M/F: NA / NA

CD Rat FEMALE	FO 0 PPM	F0 5 PPM	F0 100 PPM	F0 500 PPN
Proestrus	7	8	9	6
Vagina	(26)	(25)	(26)	(25)
Diestrus	10	9	8	7
Estrus	3	6	2	1
Infiltration Cellular, Eosinophil	1 [4.0]			
Keratin Cyst				1
Metestrus	7	6	8	12
Mucocyte, Hyperplasia			1 [3.0]	
Mucocyte, Hypertrophy	1 [2.0]		1 [3.0]	
Proestrus	6	4	7	5
HEMATOPOIETIC SYSTEM				
Bone Marrow	(26)	(0)	(1)	(25)
Lymph Node, Mandibular	(1)	(0)	(1)	(0)
Lymph Node, Mesenteric	(1)	(0)	(1)	(0)
Spleen	(25)	(0)	(1)	(24)
Pigmentation	1 [2.0]			
Thymus	(26)	(0)	(1)	(25)
Atrophy	1 [3.0]			
NTEGUMENTARY SYSTEM				
Mammary Gland	(25)	(25)	(26)	(25)
Alveolus, Hyperplasia	10 [1.8]	12 [2.1]	8 [2.1]	8 [1.4]
Duct, Hyperplasia			1 [3.0]	
Lobules, Hyperplasia	3 [2.0]	1 [1.0]	3 [1.0]	1 [1.0]
Skin	(26)	(0)	(2)	(25)
MUSCULOSKELETAL SYSTEM				
Bone	(1)	(0)	(0)	(0)
Necrosis, Focal	1 [3.0]			
Bone, Femur	(26)	(0)	(1)	(25)

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Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/22/2014 Time Report Requested: 14:11:59

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Time Report Requested: 14:11:59

First Dose M/F: NA / NA

CD Rat FEMALE	FO OPPM	F0 5 PPM	F0 100 PPM	F0 500 PPM
NERVOUS SYSTEM				
Brain, Brain Stem	(1)	(0)	(1)	(0)
Brain, Cerebellum	(1)	(0)	(1)	(0)
Brain, Cerebrum	(1)	(0)	(1)	(0)
RESPIRATORY SYSTEM				
Lung	(1)	(0)	(1)	(0)
Inflammation, Multifocal, Chronic Active	1 [3.0]			
Nose	(1)	(0)	(1)	(0)
Trachea	(0)	(0)	(1)	(0)
SPECIAL SENSES SYSTEM				
Eye	(1)	(0)	(0)	(0)
Cornea, Edema	1 [3.0]			
URINARY SYSTEM				
Kidney	(26)	(25)	(26)	(25)
Apoptosis			1 [4.0]	
Bilateral, Nephropathy	1 [2.0]			
Bilateral, Parenchym Cell, Proliferation			1 [3.0]	
Bilateral, Pelvis, Dilatation		1 [2.0]		
Inflammation, Chronic Active		1 [1.0]	2 [1.0]	
Left, Cyst				1 [2.0]
Left, Pelvis, Dilatation	1 [2.0]			
Mineralization	17 [1.8]	21 [1.3]	22 [1.5]	14 [2.0]
Pelvis, Dilatation	1 [2.0]			
Urinary Bladder	(0)	(0)	(1)	(0)

^{**} END OF REPORT **

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